



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Office of Western Region Services
Facilities and Space Management
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Menlo Park, California 94025
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July 25, 2002

MEMORANDUM

To: Robbie Havens
Land Law Examiner
Alaska State Office-Bureau of Land Management

From: Matt Correa
General Engineer
Facilities and Space Management U.S. Geological Survey

Re: Land Withdrawal Application for Sitka, Alaska

Permission is requested to file the withdrawal of 117.13 acres in Sitka, Alaska. USGS requests a 20 year extension to the withdrawal proposal of Public Land Order No. 6458 of September 6, 1983 and by Executive Order 8854 of August 16, 1941 as amended.

Attached are duplicates of the petition/application to extend the withdrawal, per 43 CFR 2310.

Your favorable consideration of our withdrawal will be appreciated_

Attachments

CC: Lee Pankratz
W. Karl Gross

Petition / Application to Extend PLO No. 6458 at Sitka, Alaska

Items Required by 43 CFR 2130.1-2(c) and 2310.1-3:

- (1) Name and address of applicant:**
U.S. Geological Survey, Department of Interior
12201 Sunrise Valley Drive
Reston, Virginia 22092
- (2) Not applicable**
- (3) Not applicable**
- (4) Type of withdrawal action requested:**
This withdrawal action requests a 20 year extension to the withdrawal proposal of Public Land Order No. 6458 of September 6, 1983 and by Executive Order 8854 of August 16, 1,941 as amended.
- (5) Land Description and Acreage:**
Sitka, Alaska
Lot 4, U.S. Survey No. 2545
The area described contains a total of 117.13 acres.
- (6) Not applicable**
- (7) The public purpose or statutory program:**
The land is being withdrawn for continued use as a seismic and magnetic observatory.

The Sitka Observatory is one of a network of magnetic observatories that constitute the core of the U.S. national magnetic data gathering effort. Sitka records the continuous fluctuations and absolute measurements in the earth's magnetic field for baseline control. The data is required for marine, land, air, and space navigation; upper atmospheric, engineering and solid waste research, mineral exploration and defense needs.

Sitka provides real-time magnetic and seismic data to many government agencies, including: the U.S. Coast Guard, Maritime Administration, U.S. Geological Survey, U.S. Air Force, Federal Aviation Administration, National Oceanic and Atmospheric Administration, National Aeronautical and Space Administration; the National Imaging and Mapping Agency.
- (8) Extent of withdrawal:**
The lands will continue to be withdrawn from settlement, sale, location or entry under the general land laws, including the mining laws for 20 years.
- (9) Not applicable**

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(10) Why a right-of way or cooperative agreement would not be adequate:

All of the property now used by the Observatory is essential for the protection of the scientific quality of the data collected. Surrounding neighborhood, zoning, environmental factors, regional and local development plans were well coordinated when the site was selected, and all have been well coordinated since that time. Easements, rights-of way and use permits have been negotiated with the City of Sitka, the Forest Service and National Park Service for use of the parts of the property that could be released for use by others without adversely affecting the data collected.

Magnetic observatory sites must be closely protected from disturbances that would occur if the Government did not have full control of all activity on the site.

(11) Duration and justification for withdrawal:

The extension of Public Land Order No. 6458 is requested for 20 years. A withdrawal extension is essential in order to provide a continuous baseline data set for public use.

(12) Available suitable alternative sites:

No suitable alternative sites have been considered for the proposed use. Alternative observatory sites have not been explored by USGS because of the spatial desirability of the present location, the deleterious effects to long-term data sets, and the study's expense.

Moving the observatory would adversely influence the distribution and continuity of data collection. For observatory research, it is necessary to provide an even distribution of monitoring points over the earth's surface. Since 1939, the Sitka observatory has continuously collected data, when the USC&GS determined the 117.13 acre parcel had the required characteristics for a magnetic and seismological observatory.

Prior to moving a magnetic and seismic observatory, like Sitka's, each proposed site must meet stringent criteria of both types of facilities, including an extensive study of geologic features and properties, location, acreage; current and proposed land use of surrounding areas. The minimum acreage necessary to effect the purpose of this withdrawal is difficult to determine because of the wide variation in geologic composition and human activity. The parcel must have sufficient size to be free of vibrational disturbances, such as, railroads, highways, construction activity, rivers or lakes used for boating; and be free of human sources of magnetic disturbances, like buildings, sewers, underground pipes, power transmission lines; vehicle and pedestrian movement

(13) Will water be needed?

Water is needed to fulfill the requested action. Water usage at the observatory site is in conformance with the state laws and procedures relating to the control, appropriation, use and distribution of water.

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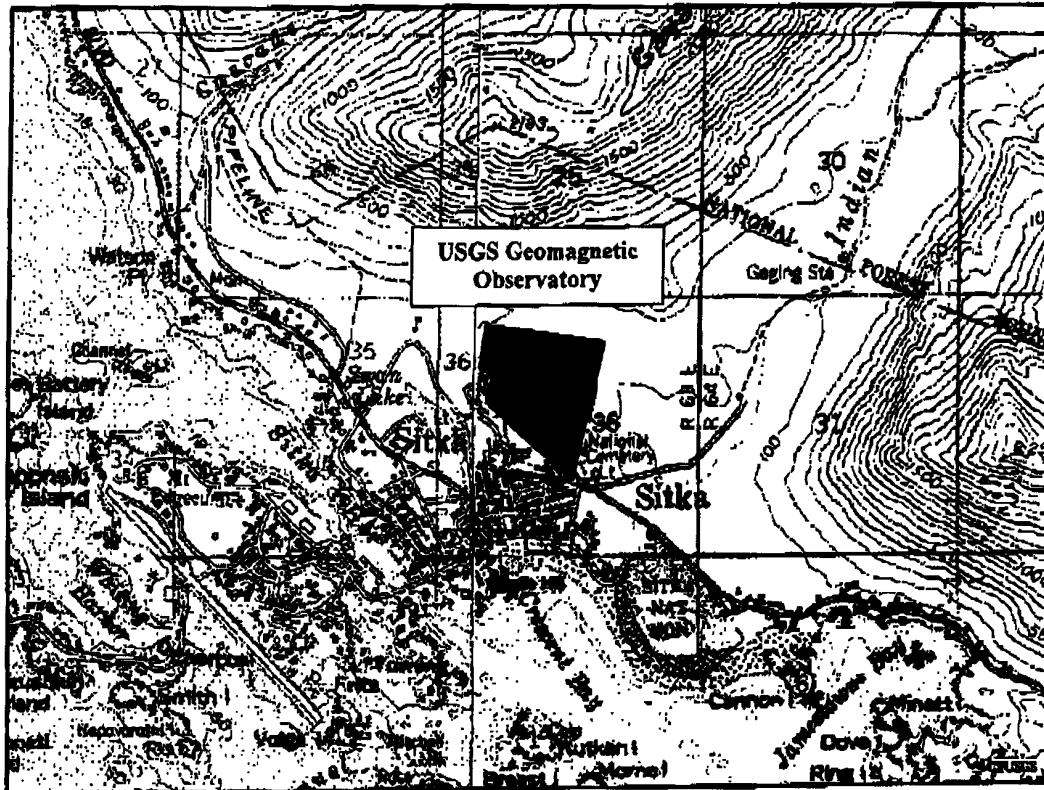
(14) The place where records can be examined:

Bureau of Land Management
222 West 7th Avenue, Number 13
Anchorage, Alaska 99513-7599

(15) Mineral Resources:

According to U.S. Geological Survey Open-file Reports 91-10, 91-343 and 96-716, mineral values in the area are low with graywacke, slate and minor conglomerates dominating the substrata.

Sitka Geomagnetic Observatory Location Map



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UNSURVEYED TOWNSHIP 55 SOUTH, RANGE 63 EAST OF THE COPPER RIVER
 MERIDIAN, ALASKA

